

Express Mail Certificate No. EV298592739US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
APPLICATION FOR LETTERS PATENT

Applicants: WU-HONG HSIEH

Title : EXTENSION CONNECTOR FOR AN
ANGLE ADJUSTABLE CYMBAL STAND

1 Claim

5 Sheets of Drawings

William E. Pelton
Reg. No. 25,702
Donald S. Dowden
Reg. No. 20,701
Cooper & Dunham LLP
1185 Avenue of the Americas
New York, New York 10036
(212) 278-0400

**EXTENSION CONNECTOR FOR AN
ANGLE ADJUSTABLE CYMBAL STAND**

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to an extension connector, and more particularly to an extension for an angle adjustable cymbal stand to enable the adjustable cymbal stand to not only extend to a desired length but also adjust to a desired angle.

2. Description of Related Art

With reference to Figs. 4 and 5, a conventional angle adjustable cymbal stand is shown to have a seat (50) firmly engaged with a support rod (61) extending from a stand (60) and a rod (52) extending from a ball (51) which is movably received in the seat (50). A knob (53) is provided on a side of the seat (50) to control the movement of the ball (51) inside the seat (50). A cymbal (64) is securely connected to the rod (52) and a nut (63) is provided to engage with a free end of the rod (52) after the rod (52) extends through the cymbal (64). A spacer (62) is sandwiched between the cymbal (64) and the nut (63).

Therefore, when the operator needs to adjust the angle of the cymbal stand, the operator needs only to loosen the knob (53) to allow the ball (51) to freely move inside the seat (50) such that the cymbal (64) angle is adjusted to cope with the space limitation.

Although the conventional cymbal stand does provide an angle adjusting function, the angle adjusting range of the cymbal (64) is limited by the length of the rod (52). That is, if a cymbal set is required and each of the cymbals is

1 connected to one another closely, it is almost impossible to have room enough to
2 allow the operator to proceed the angle adjusting process.

3 To overcome the shortcomings, the present invention tends to provide an
4 extension connector to mitigate the aforementioned problems.

5 SUMMARY OF THE INVENTION

6 The primary objective of the present invention is to provide an improved
7 angle adjustable cymbal stand having an extension connector to allow the
8 operator to have sufficient room to cope with the space limit problem.

9 Another objective of the present invention is that the extension corrector
10 is simple in assembly and inexpensive in manufacture yet the function provided
11 enables the cymbal stand to enlarge the angle adjusting range.

12 Other objects, advantages and novel features of the invention will
13 become more apparent from the following detailed description when taken in
14 conjunction with the accompanying drawings.

15 BRIEF DESCRIPTION OF THE DRAWINGS

16 Fig. 1 is an exploded perspective view showing the elements of the
17 present invention;

18 Fig. 2 is a perspective view showing the assembly of the angle adjustable
19 cymbal stand of the present invention;

20 Fig. 3 is a perspective view showing the application of the extension
21 connector of the present invention;

22 Fig. 4 is a side view showing a conventional angle adjustable cymbal
23 stand; and

24 Fig. 5 is a perspective view showing the application of the conventional

1 angle adjustable cymbal stand with a cymbal.

2 DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

3 With reference to Fig. 1, the angle adjustable cymbal stand in
4 accordance with the present invention has a receptacle (10) composed of two
5 halves (11,12) pivotally connected with one another and defining therebetween a
6 space (16), a ball linkage (20) having a first threaded end (201) at one end and a
7 ball (202) at the other end and an extension connector (30) having a first threaded
8 hole (301) at a first end of the extension connector (30) to correspond to the first
9 threaded end (201) of the ball linkage (20) and a second threaded end (302) at a
10 second end of the extension connector (30).

11 The receptacle (10) has a second threaded hole (101) defined in a bottom
12 face of the receptacle (10) to correspond to the first threaded end (201) of the ball
13 linkage (20). Each of the two halves (11,12) has a through hole (111,121) defined
14 to align with one another and to allow a threaded bolt (15) to extend therethrough.
15 A spring (13) is received in the space (16) and mounted around the threaded bolt
16 (15). An adjusting knob (14) is provided to threadingly connect to the threaded
17 bolt (15) to control the movement of the two halves (11,12).

18 With reference to Fig. 2, when the angle adjustable cymbal stand of the
19 present invention is assembled, the ball (202) is received in the space (16). Then
20 the operator is able to tighten the adjusting knob (14) to secure the two halves
21 (11,12) of the receptacle (10) such that the ball (202) is firmly clamped between
22 the two halves (11,12). Thereafter, the operator is able to use the second threaded
23 end (302) to secure a cymbal (not shown).

24 With reference to Fig. 3, when the space available is limited and the

1 operator has to setup a series of cymbals to perform, the operator is able to use
2 the second threaded end (302) to extend into the second threaded hole (101) of
3 another receptacle (10) which has its own ball linkage (20) for connection with
4 another set of ball linkage (20) and/or a cymbal (42). The connection between
5 the cymbal (42) and a ball linkage (20) is the same as that described earlier such
6 that the detailed description thereof is omitted.

7 With the provision of the extension connector (30), the operator is able
8 to extend the angle adjustable cymbal stand (40) to any position appropriate such
9 that the operator is able to setup as many cymbals as possible around the
10 performer without influencing the performer's performance.

11 It is to be understood, however, that even though numerous
12 characteristics and advantages of the present invention have been set forth in the
13 foregoing description, together with details of the structure and function of the
14 invention, the disclosure is illustrative only, and changes may be made in detail,
15 especially in matters of shape, size, and arrangement of parts within the
16 principles of the invention to the full extent indicated by the broad general
17 meaning of the terms in which the appended claims are expressed.